

In the Claims:

1-19 (canceled)

20. (original) A semiconductor device, comprising:
a package substrate having a top layer, the top layer having a group of conductive vias formed therethrough;
a layer of conductive material formed on the top layer of the package substrate;
a group of channels formed in the conductive material layer about at least some of the vias to define a group of contact pads on the vias; and
a chip electrically coupled to the package substrate through the contact pads.

21. (original) The semiconductor device of claim 20, wherein the conductive layer comprises a metal selected from a group consisting of copper, aluminum, nickel, gold, and silver.

22. (original) The semiconductor device of claim 20, wherein the conductive vias comprise a metal selected from a group consisting of copper, aluminum, nickel, gold, and silver.

23. (original) The semiconductor device of claim 20, further comprising an oxide layer formed over the conductive layer, wherein portions of the oxide layer have been removed on at least some of the contact pads.

24. (original) The semiconductor device of claim 23, further comprising solder balls soldered on at least some of the contact pads, wherein the chip is electrically coupled to the contact pads on the package substrate via the solder balls.

25. (original) The semiconductor device of claim 20, further comprising solder balls soldered on at least some of the contact pads, wherein the chip is electrically coupled to the contact pads on the package substrate via the solder balls.